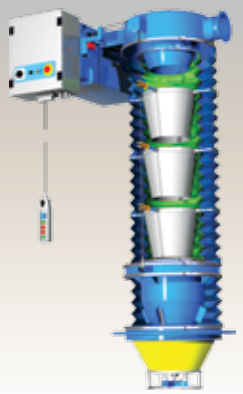
Waste Water Treatment

ZG Tanker Loading Bellows

35



Description

ZG Loading Bellows are used for efficient, dust-controlled loading of dry, dusty bulk solids into tankers. The spouts are provided with inner tapered cones to restrain the flow of material and an outer single or double bellows to provide for dust removal. At the lower end of the Loading Bellows, a polymer-coated SINT® cone with special sealing properties is provided for connection to the tanker.

Function

ZG Tanker Loading Bellows are a perfect solution for quick, clean and even loading of tankers with materials from storage silos or large hoppers.

Application

ZG Telescopic Loading Bellows are suitable for continuous loading with a maximum flow rate of 250m³/h (147 cfm) of bulk material.

The outlet can be equipped with an anti-spillage device which acts as a dustproof stopper as the Loading Bellows is being raised. The equipment features a manual or an electric winch.
A spigot on the header can be connected on site to an external de-dusting filter.
First the Loading Bellows is lowered from the stand-by position towards the inlet spout of the tanker. As soon as the bellows outlet cone has settled on the inlet spout of the tanker, the slack cable switch mounted outside the transmission box stops lowering of the bellows. The limit switch inside the transmission box stops both full extension and contraction of the bellows. Material loading is started by opening the silo outlet valve.

During filling of the tanker, the polymer SINT® coating of the outlet cone acts as a perfect dust seal. The slack cable switch activates further extension of the bellows as the tanker lowers under the increasing material weight. A level control device installed in the centre of the outlet cone signals maximum material level in the tanker compartment and orders immediate closing of the silo outlet valve. Contraction of the bellows back to stand-by position starts after a delay of approximately 10 seconds in order to enable the external filter to evacuate the remaining dust. Once the bellows is fully contracted, the cable limit switch inside the transmission box stops operation.

Benefits

- ✓ **Double bellows keeps falling product separate from dust;**
- ✓ **304/316 stainless steel contact parts;**
- ✓ **Flexible chute in Neoprene covered by Hypalon® makes bellows weather-proof, highly abrasion and temperature-resistant and durable;**
- ✓ **Reverse cone with inside level indicator indicates when tanker is full, raises loading bellows gradually and improves material distribution inside tanker;**
- ✓ **Outlet can be equipped with an anti-spillage device which acts as a dustproof stopper as Loading Bellows is being raised;**
- ✓ **Two lifting cables outside the material flow raise and lower the loading bellows without any cable wear due to material friction or obstruction to material flow.**

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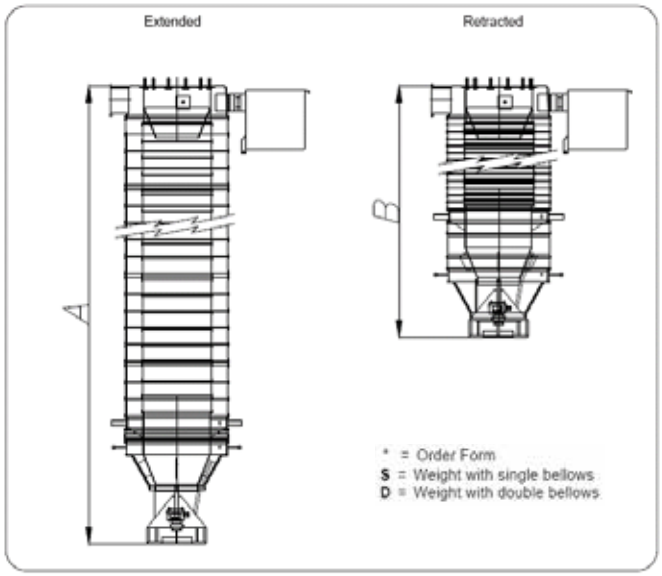
Waste Water Treatment
ZG Tanker Loading Bellows

Technical Features / Performance

- Inlet diameter 300mm (12 in)
- Maximum flow rate: 250 m³/h (147 cfm)
- Working temperature from –20 °C up to +120 °C (-4 °F up to 250 °F)
- Hoisting system equipped with an electric motor 0.55 kW and gear box with belt transmission
- Upper/lower limit switch
- Slack cable limit switch
- Metal parts in Carbon steel or 304/316 Stainless Steel
- Bellows manufactured in Neoprene / Hypalon®
- Double bellows with optional internal steel cones for granules
- Rubber bottom outlet cone to ensure perfect sealing of tanker hatch
- Control panel with remote control for fully automatic operation
- Available with rotary level indicator or vibrating level indicator
- Anti-spillage device at outlet
- 2 external hoisting cables

Overall Dimensions



*	A_{max} [mm]	B_{min} [mm]	S [kg]	D [kg]
05	1,610	1,100	183	205
07	1,890	1,140	184	207
10	2,190	1,170	185	210
12	2,370	1,200	186	211
15	2,670	1,230	188	213
17	2,950	1,270	189	215
20	3,150	1,290	190	217
22	3,430	1,330	191	219
25	3,730	1,370	192	221
27	4,010	1,400	193	224
30	4,290	1,440	195	226
32	4,590	1,470	196	228
35	4,870	1,510	197	230
37	5,170	1,540	198	223
40	5,710	1,740	205	231
42	5,990	1,770	206	233
45	6,290	1,800	207	235
47	6,590	1,840	208	237
50	6,870	1,880	209	239
52	7,150	1,910	210	241
55	7,340	1,940	211	243
57	7,710	1,980	212	245
60	8,010	2,020	213	247

This datasheet does not show the complete range but only the models most suitable for the application.